

Pediatric Quality Indicator 16 (PDI 16) Gastroenteritis

Admission Rate

July 2022

Area-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

qualityindicators.ahrq.gov

DESCRIPTION

Hospitalizations with a principal diagnosis of gastroenteritis, with a principal diagnosis of dehydration plus a secondary diagnosis of gastroenteritis per 100,000 population, ages 3 months to 17 years. Excludes hospitalizations transferred from another facility; hospitalizations with gastrointestinal abnormalities; hospitalizations with bacterial gastroenteritis; and obstetric hospitalizations.

[NOTE: The software provides the rate per population. However, common practice reports the measure as per 100,000 population. The user must multiply the rate obtained from the software by 100,000 to report hospitalizations per 100,000 population.]

NUMERATOR

Hospital discharges for patients ages 3 months through 17 years, with either:

- a principal ICD-10-CM diagnosis code for gastroenteritis (**ACPGASD***)
- a secondary ICD-10-CM diagnosis code for gastroenteritis (**ACPGASD***) and a principal ICD-10-CM diagnosis code for dehydration (**ACSDEHD***)

NUMERATOR EXCLUSIONS

Exclude discharges:

- with any listed ICD-10-CM diagnosis code for gastrointestinal abnormalities (*ACGDISD**)
- with any listed ICD-10-CM diagnosis code for bacterial gastroenteritis (*ACBACGD**)
- with admission source for transferred from a different hospital or other health care facility (*Appendix J*) (ATYPE is not 4 and UB04 Admission source -2, 3)
- with a point of origin code for transfer from a hospital, skilled nursing facility (SNF) or intermediate care facility (ICF), or other healthcare facility (*Appendix J*) (ATYPE is not 4 and UB04 Point of Origin - 4, 5, 6)
- where age in days is less than ninety days (ageday <90) or neonates (Appendix I) with missing age in days
- MDC 14 (pregnancy, childbirth and puerperium)
- with an ungroupable DRG (DRG=999)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), principal diagnosis (DX1=missing), or county (PSTCO=missing)
- with missing MDC (MDC=missing) when the user indicates that MDC is provided

[Appendix I - Definitions of Neonate, Newborn, Normal Newborn, and Outborn](#)

[Appendix J - Admission Codes for Transfers](#)

DENOMINATOR

Population ages 3 months through 17 years in metropolitan area¹ or county. Discharges in the numerator are assigned to the denominator based on the metropolitan area or county of the patient residence, not the metropolitan area or county of the hospital where the discharge occurred.

¹. The denominator is extrapolated from census estimates for children age 0-4 years of age. The term “metropolitan area” (MA) was adopted by the U.S. Census in 1990 and referred collectively to metropolitan statistical areas (MSAs), consolidated metropolitan statistical areas (CMSAs), and primary metropolitan statistical areas (PMSAs). In addition, “area” could refer to either 1) FIPS county, 2) modified FIPS county, 3) 1999 OMB Metropolitan Statistical Area, or 4) 2003 OMB Metropolitan Statistical Area. Micropolitan Statistical Areas are not used in the QI software.

* See below for code list

Gastroenteritis diagnosis codes: (ACPGASD)

A080	Rotaviral enteritis	A084	Viral intestinal infection, Unspecified
A0811	Acute gastroenteropathy due to norwalk agent	A088	Other specified intestinal infections
A0819	Acute gastroenteropathy due to Other small round viruses	A09	Infectious gastroenteritis and colitis, Unspecified
A082	Adenoviral enteritis	K523	Indeterminate colitis
A0831	Calicivirus enteritis	K5289	Other specified noninfective gastroenteritis and colitis
A0832	Astrovirus enteritis	K529	Noninfective gastroenteritis and colitis, Unspecified
A0839	Other viral enteritis		

Dehydration diagnosis codes: (ACSDEHD)

E860	Dehydration	E869	Volume depletion, Unspecified
E861	Hypovolemia		

Gastrointestinal abnormalities diagnosis codes: (ACGDISD)

K5000	Crohn's disease of small intestine without complications	K51411	Inflammatory polyps of colon with rectal bleeding
K50011	Crohn's disease of small intestine with rectal bleeding	K51412	Inflammatory polyps of colon with intestinal obstruction
K50012	Crohn's disease of small intestine with intestinal obstruction	K51413	Inflammatory polyps of colon with fistula
K50013	Crohn's disease of small intestine with fistula	K51414	Inflammatory polyps of colon with abscess
K50014	Crohn's disease of small intestine with abscess	K51418	Inflammatory polyps of colon with Other complication
K50018	Crohn's disease of small intestine with Other complication	K51419	Inflammatory polyps of colon with Unspecified complications
K50019	Crohn's disease of small intestine with Unspecified complications	K5150	Left sided colitis without complications
K5010	Crohn's disease of large intestine without complications	K51511	Left sided colitis with rectal bleeding
K50111	Crohn's disease of large intestine with rectal bleeding	K51512	Left sided colitis with intestinal obstruction
K50112	Crohn's disease of large intestine with intestinal obstruction	K51513	Left sided colitis with fistula
K50113	Crohn's disease of large intestine with fistula	K51514	Left sided colitis with abscess
K50114	Crohn's disease of large intestine with abscess	K51518	Left sided colitis with Other complication
K50118	Crohn's disease of large intestine with Other complication	K51519	Left sided colitis with Unspecified complications
K50119	Crohn's disease of large intestine with Unspecified complications	K5180	Other ulcerative colitis without complications
K5080	Crohn's disease of both small and large intestine without complications	K51811	Other ulcerative colitis with rectal bleeding
K50811	Crohn's disease of both small and large intestine with rectal bleeding	K51812	Other ulcerative colitis with intestinal obstruction
K50812	Crohn's disease of both small and large intestine with intestinal obstruction	K51813	Other ulcerative colitis with fistula
K50813	Crohn's disease of both small and large intestine with fistula	K51814	Other ulcerative colitis with abscess
K50814	Crohn's disease of both small and large intestine with abscess	K51818	Other ulcerative colitis with Other complication
K50818	Crohn's disease of both small and large intestine with Other complication	K51819	Other ulcerative colitis with Unspecified complications

K50819	Crohn's disease of both small and large intestine with Unspecified complications	K5190	Ulcerative colitis, unspecified, without complications
K5090	Crohn's disease, unspecified, without complications	K51911	Ulcerative colitis, Unspecified with rectal bleeding
K50911	Crohn's disease, unspecified, with rectal bleeding	K51912	Ulcerative colitis, Unspecified with intestinal obstruction
K50912	Crohn's disease, unspecified, with intestinal obstruction	K51913	Ulcerative colitis, Unspecified with fistula
K50913	Crohn's disease, unspecified, with fistula	K51914	Ulcerative colitis, Unspecified with abscess
K50914	Crohn's disease, unspecified, with abscess	K51918	Ulcerative colitis, Unspecified with Other complication
K50918	Crohn's disease, unspecified, with Other complication	K51919	Ulcerative colitis, Unspecified with Unspecified complications
K50919	Crohn's disease, unspecified, with Unspecified complications	K520	Gastroenteritis and colitis due to radiation
K5100	Ulcerative (chronic) pancolitis without complications	K521	Toxic gastroenteritis and colitis
K51011	Ulcerative (chronic) pancolitis with rectal bleeding	K522	Allergic and dietetic gastroenteritis and colitis
K51012	Ulcerative (chronic) pancolitis with intestinal obstruction	K5221	Food protein-induced enterocolitis syndrome
K51013	Ulcerative (chronic) pancolitis with fistula	K5222	Food protein-induced enteropathy
K51014	Ulcerative (chronic) pancolitis with abscess	K5229	Other allergic and dietetic gastroenteritis and colitis
K51018	Ulcerative (chronic) pancolitis with Other complication	K5281	Eosinophilic gastritis or gastroenteritis
K51019	Ulcerative (chronic) pancolitis with Unspecified complications	K5282	Eosinophilic colitis
K5120	Ulcerative (chronic) proctitis without complications	K52831	Collagenous colitis
K51211	Ulcerative (chronic) proctitis with rectal bleeding	K52832	Lymphocytic colitis
K51212	Ulcerative (chronic) proctitis with intestinal obstruction	K52838	Other microscopic colitis
K51213	Ulcerative (chronic) proctitis with fistula	K52839	Microscopic colitis, Unspecified
K51214	Ulcerative (chronic) proctitis with abscess	K900	Celiac disease
K51218	Ulcerative (chronic) proctitis with Other complication	K901	Tropical sprue

K51219	Ulcerative (chronic) proctitis with Unspecified complications	K902	Blind loop syndrome, not elsewhere classified
K5130	Ulcerative (chronic) rectosigmoiditis without complications	K903	Pancreatic steatorrhea
K51311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding	K904	Malabsorption due to intolerance, not elsewhere classified
K51312	Ulcerative (chronic) rectosigmoiditis with intestinal obstruction	K9041	Non-Celiac gluten sensitivity
K51313	Ulcerative (chronic) rectosigmoiditis with fistula	K9049	Malabsorption due to intolerance, not elsewhere classified
K51314	Ulcerative (chronic) rectosigmoiditis with abscess	K9089	Other intestinal malabsorption
K51318	Ulcerative (chronic) rectosigmoiditis with Other complication	K909	Intestinal malabsorption, Unspecified
K51319	Ulcerative (chronic) rectosigmoiditis with Unspecified complications	K912	Postsurgical malabsorption, not elsewhere classified
K5140	Inflammatory polyps of colon without complications	K9281	Gastrointestinal mucositis (ulcerative)

Bacterial gastroenteritis diagnosis codes: (ACBACGD)

A020	Salmonella enteritis	A050	Foodborne staphylococcal intoxication
A030	Shigellosis due to shigella dysenteriae	A051	Botulism food poisoning
A031	Shigellosis due to shigella flexneri	A052	Foodborne clostridium perfringens [clostridium welchii] intoxication
A032	Shigellosis due to shigella boydii	A053	Foodborne vibrio parahaemolyticus intoxication
A033	Shigellosis due to shigella sonnei	A054	Foodborne bacillus cereus intoxication
A038	Other shigellosis	A055	Foodborne vibrio vulnificus intoxication
A039	Shigellosis, Unspecified	A058	Other specified bacterial foodborne intoxications
A040	Enteropathogenic Escherichia coli infection	A059	Bacterial foodborne intoxication, Unspecified
A041	Enterotoxigenic Escherichia coli infection	A060	Acute amebic dysentery
A042	Enteroinvasive Escherichia coli infection	A061	Chronic intestinal amebiasis
A043	Enterohemorrhagic Escherichia coli infection	A070	Balantidiasis
A044	Other intestinal Escherichia coli infections	A071	Giardiasis [lambliasis]
A045	Campylobacter enteritis	A072	Cryptosporidiosis
A046	Enteritis due to yersinia enterocolitica	A073	Isosporiasis
A047	Enterocolitis due to clostridium difficile	A074	Cyclosporiasis
A0471	Enterocolitis due to clostridium difficile, recurrent	A078	Other specified protozoal intestinal diseases
A0472	Enterocolitis due to clostridium difficile, not specified as recurrent	A079	Protozoal intestinal disease, Unspecified
A048	Other specified bacterial intestinal infections	B3782	Candidal enteritis
A049	Bacterial intestinal infection, Unspecified		